

Form 1 - Application Cover Sheet

Download this application in Word format – <http://www.usoe.org/curr/edtech/grants/fed/>

Fiscal LEA: Piute School District

Fiscal LEA Superintendent Name: Lewis Mullins

Fiscal LEA Superintendent Signature:

Signature Date: 1-26-03

Primary Contact Name: Lewis Mullins

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Grant Category:

☐ Professional Development for Technology Leadership

☐ Infrastructure Improvement and Technical Support

☒ Classroom Models for Inquiry-based Student Access

Grant Type:

☐ Single LEA

☒ Partnership

Amount Requested: \$ 185,127

Form 2 - Participant Details
(See the Absolute Priorities Rubric.)

Absolute Priority 1a): Targeted LEAs in grant application are high poverty

LEA/Organizations

LEA/Organization Name	Benefit/Service to Grant	Date EETT Assurances Signed by Superintendent	LEA Percentage or Number of Students in Poverty	LEA EETT Formula Funds per student Amount	Percent of LEA EETT Formula Funds Transferred to Other Programs
Piute School District	Each district will supply the computers needed for this project (estimated value over \$23,000 per district). Each districts will also pick up the admin costs which include SS tax and retirement payment for the stipends (estimated value over \$6,000 per district). Also, travel will be covered by the districts (estimated value \$2,000 per district). District, regional and state trainers time and salary (estimated value \$13,000 per district)	1-29-03	23.21%	> \$10	0%
Juab School District	“ “ “	1-29-03	11.69%	> \$10	0%
North Sanpete School District	“ “ “	1-29-03	14.45%	> \$10	0%

(Insert as many rows as needed.)

Form 2 (continued)

Absolute Priority 1b): Low Performing or designated as having substantial need in acquiring and/or using technology

Participating Schools

District	School Name	Percentage or Number of Students in Poverty	Criteria for Selecting this School	[Need of Technology/Low Performance, etc.]	Benefit from Grant \$	Submitted Dec 2001 Survey yes/no
Piute School District	Oscarson Elementary	86%	High poverty	Need of Technology	3994	yes
Piute School District	Circleville Elementary	92%	High poverty	Need of Technology	10985	yes
Juab School District	Nephi Elementary	Title 1 school	High poverty	Need of Technology	394072	yes
Juab School District	Mona Elementary	58%	High poverty	Need of Technology	22170	yes
North Sanpete School District	Moroni Elementary	67%	High poverty	Need of Technology	29759	yes

Form 3 – Budget Narrative and Budget Detail
Download the budget detail sheets in Excel format at
<http://www.usoe.org/curr/edtech/grants/fed/>

Budget Narrative:

Absolute Priority 2): *Grant's proposed activities are structured to guarantee EETT assurances. All formula ESEA funds allocated under Title II Part D are committed for technology professional development and activities.*

Absolute Priority 3): *Grant activities are closely aligned with district(s) 5-year technology plans and NCLB activities*

Absolute Priority 4): *Less than \$20 per student in EET formula funds*

Absolute Priority 5): *LEAs commit 5% of grant amount to an independent state researcher/evaluator*

Grant Focus 5): *Budget items clearly support project activities. Budget is clearly integrated with formula EETT funds and other NCLB funds.*

Each of the districts will meet EETT assurances and allocate all formula Title II, Part D funds for the proposed technology professional development services and activities. The proposed project is aligned with (and will be) part of each of the three districts 5-year technology plans and an important part of their NCLB plans. As indicated in Form 2, each school has less than \$10 in EETT formula funds.

The budget reflects a 5% set-aside for the state evaluator activities and services, in the amount of \$8,049.00

As the budget indicates, over half the funding is directly related to the professional development training and activities. TIPS will contract with the Cues Regional Technology center to provide services for \$52, 578.00. Travel costs for classroom teachers to attend workshops will cost \$14,000.00 (includes workshop hotel rooms for all participants, meals and travel money for collaboration meetings between the three districts personnel)

Other costs of the grant will include property (i.e. equipment and supplies) in the amount of \$110,500, which breaks down as follows:

For 3rd Grade Students – Keyboarding Device – 222 @ \$250 per = \$55,500.00
For 4th & 5th Grades – Scanners-- 66 \$100 \$6,600.00
For 4th, 5th and 6th Grades - Digital still cameras 132 \$200 \$26,400.00
For 6th Grade – Digital video cameras
Digital video camerasfor grade--- 44@ \$500 = \$22,000.00

Each of these devices will be used by students and teachers as described in the narrative section of the application for the purpose of training and implementing inquiry-based, technology enriched education in the classrooms of the targeted schools.

Form 4 - Executive Summary (2 pages or less)

Title: Technology Integration Projects for Students (TIPS)

Abstract:

The proposed project, Technology Integration Projects for Students (TIPS), is a collaborative to improve the integration of technology into the classroom that involves three school districts: Piute School District, Juab School District and North Sanpete School District. Five schools among these school districts will be involved in the project. At each of these schools, one 3rd grade, one 4th grade, one 5th grade and one 6th grade class will be selected for initial participation. The goal of the grant seeks to address the need for earlier adoption and integration of technology in the classroom. This goal will be addressed by placing hardware in the hands of students and providing training sessions in use of the equipment in a way that matches with the Utah Core learning objectives for technology and academic content. This training will be provided on-site at the schools by CUES regional trainers and the UEN and USOE trainers. Teachers of the targeted classrooms will be invited to attend two 3-day workshops. The workshop activities will address both the first goal and the second goal of the project (to increase the integration of technology into the core curriculum) by training teachers first 1.) on the Utah Core Curriculum elements they are charged to teach, and 2.) to learn how to integrate their Core oriented lessons with technology concepts and implementation in the classroom. These workshops will result in teachers each compiling 12 Core-technology integrated lesson plans that they will then bring into their teaching. The aim of the project is to assist teachers and students in the learning process to effect student outcomes in measurable ways. The project will track student outcomes (grades, attendance and standardized test scores—Core tests) and assist the state evaluator in tracking both formative and summative outcomes related to the project.

Needs and Goals:

NEED FOR EARLY ADOPTION AND INTEGRATION OF LEARNING TECHNOLOGIES

Piute, Juab and North Sanpete all have a need for their students to have early exposure to a wide range of technologies. While schools in Utah differ in the amount of resources they have to devote to new technology, all schools in the state have made great progress in acquiring access to technology hardware and software. Each school has done so with the hope of improving instruction and educational outcomes. Nonetheless, these hopes are not being realized by the mere presence of the technologies in the school. If schools and teachers do not increase their capacity to integrate these technologies into the classroom any boost in learning outcomes will likely remain elusive. Regrettably, resources for appropriate teacher training and technology support is lacking among schools in low-income areas. Adding to the difficulties of technology

integration is the fact that many children are not exposed to new technology at home in low-income communities (Bellcore Survey, 1999).

Academic preparedness for later grades suffers when students have not had early exposure to computer technology. While teachers at the high schools may have the skills to teach advanced subjects with technology featured, students often lack the requisite technology-related skills and experience. For example, math teachers could use spreadsheets to show students how to graphically display formula outcomes, but may be hindered in doing so if students are not already familiar with the use of spreadsheets. English teachers might be able to assign lessons that involved students developing their own ebooks, were students were more familiar with word processing programs (e.g. Word).

The Technology Integration Projects for Students (TIPS) will seek to address the need for early adoption and integration of technology into classroom learning by establishing a systematic and effective model for change.

NEED FOR TEACHER TRAINING ON INTEGRATION OF TECHNOLOGY INTO CORE CURRICULUM

Regardless of a teacher's interest in technology and the availability of technology tools, the level of penetration of technology education into the classroom is often hindered by the competing demands teachers face in just assuring that the basic (R³) academic needs are met, as well as recent state competency tests (UPASS). Many teachers find it difficult to adequately cover the core curriculum with their students, let alone the perceived "add-on" of technology instruction to their plate. This is especially true in schools like the one's partnering in this grant application, where teachers are working with a higher percentages of students who are from low-income backgrounds and rural geography—where students tend to have less exposure to technology at home and in their community. An additional obstacle to increased access and use of technology in the classroom is that computers and related technology often require teaching styles that differ from traditional pedagogy (Wired For Service, 2003).

Fortunately technology does not need to be an extra thumb or burden. These very real and significant pressures that keep teachers from making technology a larger part of their instruction plan can, ironically, be lessened by the very use of technology. With proper training, the integration of technology into schools can not only engage students more and increase students motivation and confidence (Haspels, 2003), but can help teachers meet their responsibilities in teaching the Core and engage students well. This application proposes a project to help teachers in the targeted school districts learn how to integrate technology in to the Core Curriculum.

GOALS OF PROJECT

TIPS proposes two overall goals. The first goal is to increase technology integration through grade appropriate training for students and access to needed equipment.. The second goal is to provide training and collaborative time for teachers to insure the units they teach align with the state core and plan technology integration. The objectives and outcomes of this project were selected based on concurrent needs of the partnering LEAs for improved technology integration into the classroom and teacher training in a way that is aligned with each district's 5-year technology plans and NCLB activities

Form 5 - Project Details (6 pages or less)
(See the Competitive Priorities and Grant Focus Rubrics.)

Grant Title: Technology Integration Projects for Students (TIPS)

Project Goals:

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2. The second goal is to provide training and collaborative time for teachers to insure the units they teach align with the state core and plan technology integration.

Project Steps:

July 28,29,30, 2003	1st teacher in-service date. USOE and UEN staff to help with Core alignment.
Aug 4,5,6 , 2003	2nd teacher in-service date. Technology integration lesson plan training.
Aug 25-Sept 22, 2003	Initial student training.
Dec 1, 2003-Jan 11, 2004	Continued student training.
June 7-11, 2004	Teacher reassessment of integration. Share successes and work on concerns.

Project Evaluation:

TIPS will participate in the State research and evaluation. The proposed project has set aside 5% of the budget for this purpose. The program partnering schools will provide the evaluator with all relevant program and outcome data. In addition, TIPS will track each of the components of the evaluation. This will incorporate the collection of both quantitative and qualitative data for analysis. Formative evaluation will be used throughout the project for the purpose of making necessary changes to meet participants' needs. The summative evaluation is in the form of the final report and answers the questions: Was there fidelity between the proposed plan and what was implemented? Were the goals and objectives accomplished? Did the project make a difference?

Interview data will be collected immediately following initial intake of students into the TIPPS program. Follow-up interviews will be conducted at the end of the program year. The interviews will explore different domains of youths' involvement in the program and their educational outcomes. Likewise, survey information of teachers at the beginning and ending of their training will guide workshop activities and assess the worth of those activities.

Project Research Basis:

This project will be developed on research-based principles for staff-development and technology integration. They are also based on the Milken Foundation research that the Utah Core Curriculum is based upon.

Links to this research can be found at the following sites--

Supporting Links:

2000 Research Report on the Effectiveness of Technology in Schools
<http://www.sunysuffolk.edu/Web/Central/InstTech/projects/iteffrpt.pdf>

Milken Foundation - Education Technology
<http://www.mff.org/edtech/> ; <http://www.edweek.org/sreports/tc98/ets/ets-n.htm>

Project Narrative:

Competitive Priority 1): Professional development activities address all Utah Staff Development Guidelines for context, process and content. Grant targets student achievement needs.

Professional development proposed by TIPS will contract services of CUES regional trainers, as well as UEN and USOE trainers. Each of these trainers follow with high fidelity the Utah Staff Development Guidelines. This project targets student achievement outcomes, specifically classroom grades and Core test achievement scores.

Competitive Priority 2):propose to remedy specific issues that qualify the grant application using research-based best practices. Staff development model aligns with and supports the local/district/state technology and staff development plans. Model provides strategies to incorporate formative data-based decisions.

The heart of TIPS involves professional development that is provided by Utah Education agencies that specialize in research-based practices. The Milken Foundation has documented well the elements that the Utah Core Curriculum is based upon. In addition, the training of students and connecting them with the planned hardware is research based, based on the research summarized in the 2000 Research Report mentioned in the Supporting Links.

Competitive Priority 3): *Combined Urban-Rural partnerships are integral to accomplishing the proposed activities to improve the use of technology in instruction. Benefit of grant partnerships is clear and compelling.*

The partnership between the districts of in this application is vital in allowing cross-fertilization of ideas. As noted in the budget travel, there will be contact between schools of other districts as teachers consult with one another and develop plans (at the workshops).

Competitive Priority 4): *Grant budget is integrated with LEA's NCLB formula fund expenditures.*

As shown in Form 2, all of the participating LEA's have integrated their formula funding with the proposed project.

Competitive Priority 5): *100% of schools have completed the December 2001 Ed Tech Survey..*

All schools have completed the survey as shown in the document at the website:
<http://www.usoe.org/curr/edtech/plans/survey/>

Grant Focus 1): *Project is based on independent and/or peer-reviewed scientifically-based research and will clearly improve student academic achievement through the use of technology*

As mentioned above, the project focuses on elements of technology education that have been found in research to have merit in improving student academic achievement. A particular feature of TIPS that is noted in research to be important for student outcomes is the inclusion of teachers staff development activities which train teachers in how to properly integrate their lessons (and Core content) with technology (Wired For Service, 2003)

Grant Focus 2): *Project increases student classroom access to technology in targeted, high needs schools by improving the human or technical infrastructure. The project design includes core curriculum-focused teaching methodologies that will also increase student technology literacy*

Both the human and technical infrastructure of the target schools will be improved. The project calls for training of small groups of students and teachers and, subsequently, more students and teachers until the entire school has increased integration of technology in the learning process. A central feature of the proposed project is the workshop activity that will refamiliarize teachers with the Core Curriculum pedagogy they are charged with in the classroom. Then, and only then, teachers will learn and practice integrating the Core with technology.

Grant Focus 3): *Project improves parent and family involvement and communication among students, parents and school personnel and includes relevant community partnerships such as adult literacy providers*

At each school TIPS will invite parents to a 2-night "parent-student-community" night that will focus on technology education. This activity will be a opportunity for students to display their technology-rich school work projects for parents and community. Also, community members will be invited to the night-activity will feature presentations by students for community members to learn about how technology is used in the classroom. Each school will sponsor at least one showcase per year.

Grant Focus 4): Project has processes in place to collect summative data for the state researcher/evaluator. Project has processes in place to collect summative data for the state researcher/evaluator and to respond to students academic achievement data as it relates to project interventions and to communicate fully among grant participants over the project's life span.

Yes, as described in the evaluation section of the application.

Grant Focus 5):...see Budget Narrative & Details

Yes, as described in the budget narrative.

Classroom Model 1): Staff development targets core areas helping the teacher to acquire a variety of integration techniques to enrich classroom instruction with technology activities. The instructional delivery method is based on the content's learning objective and on available equipment. Model requires student access to technology in the classroom.

To address the need for earlier adoption and integration of learning technologies TIPS proposes the establishment of a program that will bring into the classroom an increasing (with grade level) array of technology devices and technology-infused learning elements. In particular, TIPS will provide students hardware and software and training that allows them to master the technologies and use them in their learning. A series of training sessions will be conducted in school by CUES regional trainers, technology experts. CUES personnel have developed a proven model for training that involves the whole of a selected class. On the day of training small groups of students (usually about 5) will be taken to a training room in the school to receive a 2- hour training session on how to use the devices and/or software under consideration. While this training is going on the remainder of the students from the classroom will be given instruction by another of the CUES staff who has prepared in advance to teach students a technology integrated lesson that is coordinated with the classroom teachers lesson plan. In this sense everyone will be getting exposure to student-centered, inquiry-based technology-rich instruction.

These trained students will then provide training to their peers in the classroom. They will become the resident experts that help their fellow classmates develop expertise themselves.

Multiple trainings will be conducted over a period of weeks. Each time training occurs, new groups of students will be selected so that each student gets the opportunity to be in the select training groups.

These trainings will be grade-specific, appropriately matched to help students acquire skills in a way that is logically and logistically developmental—with skills being learned one-upon-another. Specifically,

3rd grade will focus on keyboarding devices
4th & 5th scanner & camera
6th multimedia computer, digital camera, digital-video

This progression is meant to be logically and logistically sequential, with students learning how to use and implement the given technology in their education. For example (only example), in 3rd grade students may learn how to type titles and tables that present their findings about back-yard creatures. In 4th and 5th grade students may learn how to capture the images of back-yard

creatures digitally using a digital camera and a scanner—and import these into their ebook “What Lies Beneath—Creatures From My Yard.” In 6th grade students may learn to use a digital camera and do video editing on the computer as they create a documentary entitled “Backyard Curiosities—A Documentary” Each of these activities will not be done with technology as the driving force, but instead technology will assist the teacher and student in developing an inquiry-base approach to Core Curriculum-based instruction and knowledge.

Classroom Model 2): Model promotes student group use of computers for classroom product or project activities. Staff development model does not include using drill and practice as a way to effectively involve students in technology. Teacher learns how to mentor student use – separating the glitz from quality content. Teachers learn effective use of assessment via rubrics. Model includes how to form and support peer-resource teams to mentor students in technology applications.

In addition to the student trainings, teachers will be trained. The model for that training is based on research-based practices that have been incorporated over the past number of years into the CUES regional trainer, as well as UEN and USOE trainer packages.

The teacher training and workshops will proceed as follows.

In addition to the in-school trainings the teacher will learn how to mentor students in the use of technology in a way that involves natural integration into the learning process (and not drill and practice). The focus will be on project-based learning, inquiry-based learning opportunities for students.

To address the need for teacher training on integration of technology into core curriculum teachers of the targeted schools and classes will travel to (Cedar City likely) workshops, on two different weeks. In the first training they will be provided free training by the USOE Core Curriculum staff on the core curriculum. They will learn what the core concepts are and how they should be teaching them. Once this understanding is established they will then be trained on integration of technology with the core for their grade level. Next the teachers will develop lesson plans. These workshops will pair teachers with one another in ways that provide mutual support. The aim of the workshop will be to have each teacher trained and leave the first workshop with twelve lesson plans each. Teachers will return to their classrooms and begin the teaching of those lessons. The second workshop will again bring the teachers together, this time with the emphasis on evaluating, reviewing best practices, reviewing and overcoming difficulties in integration of technology into the classroom.

Classroom Model 3): Staff development develops teacher collaboration to gather ideas and resources. Model includes practice at adapting online resources to meet classroom curricular needs.

Throughout both workshops, teachers will be working closely with one another to gather ideas and resources, including online resources and other resources.

Classroom Model 4): Staff development focuses on high quality inquiry-based, student-centered teaching using student activities such as high-quality webquests. Staff development is comprehensive in developing skills needed by teachers to use technology as an integral part of students achieving curriculum mastery.

Classroom Model 5): Model teaches how to design, deliver, and assess student learning activities that integrate computers/technology for a variety of student grouping strategies and for diverse student populations. Teachers become fluent in designing and using rubrics.

Addressing Model 4 & 5: As described above, teachers will be involved in staff development that emphasizes not exercises and drills but the inquiry-based orientation that seeks to draw students by their own desires to know. The development activities will be comprehensive. At the workshops teachers will learn how to develop formative evaluation plans and systems that will be able to provide them ongoing feedback as to the usefulness and completeness of the technology integration they do.

Classroom Model 6): *Model includes computer use to support problem solving, data collection, information management, communications, presentations, and decision-making. Model promotes technology as a natural tool for student-centered teaching and learning.*

The TIPS program will focus on ever increasing (by grade) levels of involvement of students in a natural student-centered approach to learning by gathering information, decision-making, managing that information, and communicating findings (both in writing and via presentations) to others. The hope is that students can learn to value technology as a tool that assists them in answering questions for themselves and their wider community.

Form 6 - Partnership letters of support

Enclose a signed letter from each Partner Organization indicating:

- support for the grant,
- support for the goals stated within this grant application and
- intention to abide by the assurances for NCLB flow-through monies.